IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1 . (Currently amended) A transgenic mouse comprising a modified glycoprotein V (GP V) gene, wherein the mouse has a homozygous modification with ~~at least one allele of said gene has been modified by~~ a construct which removes a sequence of GP V comprising nucleotides encoding Met 1 to Leu 389 of SEQ ID NO:12 and wherein said mouse has platelets with an increased aggregation response to a low concentration of thrombin ~~a decreased bleeding time~~ compared to platelets from a mouse homozygous for the wild type GP V gene.

2. (canceled)

3. (Previously presented) Platelets isolated from blood plasma of the mouse of claim 1.

4. (canceled)

5. (Currently amended) A method of preparing a transgenic mouse comprising a modified glycoprotein V gene, wherein the mouse has a homozygous modification with ~~at least one allele of said gene has been modified by~~ a construct which removes a sequence of GP V comprising nucleotides encoding Met 1 to Leu 389 of SEQ ID NO:12, said method comprising:

a) introducing into embryonic stem cells a nucleic acid molecule ~~encoding~~ a ~~modified GP V gene~~ comprising a construct which removes a sequence of GP V comprising nucleotides encoding Met 1 to Leu 389 of SEQ ID NO:12;

b) generating a transgenic mouse from the cells resulting from step a); ~~and~~

c) breeding the transgenic mouse to obtain a transgenic mouse homozygous for the modified GP V gene; and

d) determining that ~~the bleeding time of~~ platelets from the homozygous transgenic mouse have an increased aggregation response to a low concentration of thrombin compared to platelets from ~~is less than the bleeding time of~~ a mouse homozygous for the GP V gene.

6. – 9. (canceled)

10. (Currently amended) A method of preparing a transgenic mouse comprising a nonfunctional glycoprotein V gene, wherein the mouse has a homozygous modification with ~~at least one allele of said gene has been modified by~~ a construct which removes a sequence of GP V comprising nucleotides encoding Met 1 to Leu 389 of SEQ ID NO:12, said method comprising:

a) introducing into embryonic stem cells a nucleic acid molecule ~~encoding~~ comprising a construct which removes a sequence of GP V comprising nucleotides encoding Met 1 to Leu 389 of SEQ ID NO:12 ~~disrupted or nonfunctional GP V gene~~ and a selectable marker;
b) identifying and selecting transformed cells;
c) injecting the transformed cells from step b) into blastocysts; ~~and,~~
d) generating a transgenic mouse from the blastocysts of step c), wherein the generated transgenic mouse is chimeric for the disrupted or nonfunctional GP V gene and wherein said mouse has platelets with an increased aggregation response to a low concentration of thrombin ~~a decreased bleeding time~~ compared to platelets from a mouse homozygous for the wild type GP V gene;
e) breeding the chimeric mouse with a wild-type mouse to produce a mouse heterozygotic for the nonfunctional GP V gene;
f) crossing a heterozygotic mouse produced in step e) with a mouse which is chimeric or heterozygotic for the nonfunctional GP V gene; and
g) selecting a mouse homozygotic for the nonfunctional GP V gene from the resulting progeny.

11. – 14. (canceled)

15. (Currently amended) A method to identify an agent that modulates a thrombotic response of a transgenic mouse having a modified GP V gene, wherein the mouse has a homozygous modification with ~~at least one allele of said gene has been modified by~~ a construct which removes a sequence of GP V comprising nucleotides encoding Met 1 to Leu 389 of SEQ ID NO:12 and wherein said mouse has platelets with an increased aggregation response to a low concentration of thrombin ~~a decreased bleeding time~~ compared to platelets from a mouse homozygous for the wild type GP V gene,

comprising the step of exposing the mouse to the agent and determining whether the agent modulates the thrombotic response.

16 - 20 (canceled)

21. (Currently amended) A method of determining the effect of an agent on a characteristic of a mouse that is attributable to the expression of the GP V gene, wherein the mouse has a homozygous modification with ~~at least one allele of said gene has been modified by~~ a construct which removes a sequence of GP V comprising nucleotides encoding Met 1 to Leu 389 of SEQ ID NO:12 and wherein said mouse has platelets with an increased aggregation response to a low concentration of thrombin ~~a decreased bleeding time~~ compared to platelets from a mouse homozygous for the wild type GP V gene, and wherein said characteristic is platelet function, said method comprising;

a) administering said agent to the mouse of claim 1;

b) maintaining said mouse for a desired period of time after said administration; and,

c) determining whether the characteristic of said mouse that is attributable to the expression of the modified GP V gene has been affected by the administration of said agent.

22. (canceled)

23. (Currently amended) A cell isolated from a transgenic mouse that comprises a transgene stably integrated into the mouse's genome, said transgene encoding a modified glycoprotein V gene, wherein the mouse has a homozygous modification with ~~at least one allele of said gene has been modified by~~ a construct which removes a sequence of GP V comprising nucleotides encoding Met 1 to Leu 389 of SEQ ID NO:12 and wherein said mouse has platelets with an increased aggregation response to a low concentration of thrombin ~~a decreased bleeding time~~ compared to platelets from a mouse homozygous for the wild type GP V gene.

24. (Currently amended) The ~~cell~~ method of claim ~~23~~ 5, further comprising the step of introducing the ~~wherein said~~ transgene ~~has been introduced into said mouse or an~~

~~ancestor of said mouse~~ via homologous recombination in embryonic stem cells~~, and further wherein said mouse expresses a modified GP V protein~~.

25. (canceled)

26. (Currently amended) The mouse ~~line~~ of claim ~~24~~ 1, wherein said mouse is fertile and transmits the modified GP V gene to its offspring.

27. (Currently amended) The mouse ~~line~~ of claim ~~23~~ 1, wherein the modified GP V protein is nonfunctional.

28. (Currently amended) A method of determining the effect of an agent on a characteristic of a mouse that is attributable to the expression of the GP V gene, wherein the mouse has a homozygous modification with ~~at least one allele of said gene has been modified by~~ a construct which removes a sequence of GP V comprising nucleotides encoding Met 1 to Leu 389 of SEQ ID NO:12 and wherein said mouse has platelets with an increased aggregation response to a low concentration of thrombin ~~a decreased bleeding time~~ compared to platelets from a mouse homozygous for the wild type GP V gene, and wherein said characteristic is hemostasis, said method comprising;

a) administering said agent to the mouse of claim 1;

b) maintaining said mouse for a desired period of time after said administration; and,

c) determining whether the characteristic of said mouse that is attributable to the expression of the modified GP V gene has been affected by the administration of said agent.

29. (Currently amended) A method of determining the effect of an agent on a characteristic of a mouse that is attributable to the expression of the GP V gene, wherein the mouse has a homozygous modification with ~~at least one allele of said gene has been modified by~~ a construct which removes a sequence of GP V comprising nucleotides encoding Met 1 to Leu 389 of SEQ ID NO:12 and wherein said mouse has platelets with an increased aggregation response to a low concentration of thrombin ~~a decreased bleeding time~~ compared to platelets from a mouse homozygous for the wild type GP V gene, and wherein said characteristic is coagulation, said method comprising;

a) administering said agent to the mouse of claim 1;

b) maintaining said mouse for a desired period of time after said administration; and,

c) determining whether the characteristic of said mouse that is attributable to the expression of the modified GP V gene has been affected by the administration of said agent.

30. (Currently amended) A method of determining the effect of an agent on a characteristic of a mouse that is attributable to the expression of the GP V gene, wherein the mouse has a homozygous modification with ~~at least one allele of said gene has been modified by~~ a construct which removes a sequence of GP V comprising nucleotides encoding Met 1 to Leu 389 of SEQ ID NO:12 and wherein said mouse has platelets with an increased aggregation response to a low concentration of thrombin ~~a decreased bleeding time~~ compared to platelets from a mouse homozygous for the wild type GP V gene, and wherein said characteristic is thrombosis, said method comprising;

a) administering said agent to the mouse of claim 1;

b) maintaining said mouse for a desired period of time after said administration; and,

c) determining whether the characteristic of said mouse that is attributable to the expression of the modified GP V gene has been affected by the administration of said agent.